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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BRIAN A. BATKE, GARY W. BACZKOWSKI,
and KENWOOD H. HALL

Appeal 2009-008404
Application 09/967,124¹
Technology Center 3600

Before JOSEPH F. RUGGIERO, MARC S. HOFF, and
ELENI MANTIS MERCADER, *Administrative Patent Judges*.

HOFF, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The real party in interest is Rockwell Automation, Inc.

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a Final Rejection of claims 1-20. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

Appellants' invention concerns an industrial control system that allows for remote programming and modifying of controller programs. A web access module stores controller programs that are implemented on a programmable logic controller (PLC) and/or other control devices. The web access module also stores programming software that can be employed to create or modify controller programs. Upon creating or modifying controller programs, remote devices can provide the generated programs to the web server via the web (Spec. 4).

Claim 1 is exemplary of the claims on appeal:

1. An industrial control system for controlling an industrial process comprising:

a plurality of I/O devices capable of exchanging signals with the industrial process;

a web access module including a web server coupled to a programmable logic control (PLC), wherein the web server is capable of being coupled to at least one remote device via the Internet, and wherein the PLC is coupled to the I/O devices;

wherein the web access module further includes program development software including application software that can be utilized to generate a controller program for at least one of the PLC and one of the I/O devices, and

wherein the web server is capable of providing the program development software onto the Internet for transmission to the remote device, so that the remote device is able to generate the controller program.

The Examiner relies upon the following prior art in rejecting the claims on appeal:

Papadopoulos

US 6,061,603

May 9, 2000

Ryan	US 6,477,435 B1	Nov. 5, 2002
Chan	US 6,588,673 B1	Jul. 8, 2003
Lindner	US 6,640,140 B1	Oct. 28, 2003
Hauet	US 6,799,077 B1	Sep. 28, 2004
Bronikowski	US 6,947,798 B2	Sep. 20, 2005

Claims 1-5, 10, and 14²-20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Papadopoulos in view of Lindner and Bronikowski.

Claims 6-9, 11, and 12 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Papadopoulos in view of Hauet, Lindner, and Bronikowski.

Claim 13 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Papadopoulos in view of Lindner, Chan, and Bronikowski.

Throughout this decision, we make reference to the Appeal Brief (“App. Br.,” filed Oct. 31, 2007), the Reply Brief (“Reply Br.,” filed Feb. 13, 2008) and the Examiner’s Answer (“Ans.,” mailed Feb. 4, 2008) for their respective details.

ISSUES

Appellants argue, *inter alia*, that neither Papadopoulos nor Lindner teaches providing program development software (PDS) onto the Internet for transmission to a remote device so that the remote device is able to generate the controller program (App. Br. 9). According to Appellants, Papadopoulos teaches remote control of a PLC from a remote HMI (human-machine interface), by providing commands to the PLC from the HMI (*id.*), and

² Claim 14 is not listed in the Examiner’s Statement of Rejection, but is discussed in the detailed analysis (Ans. 8), so we include it here.

Lindner teaches only uploading a webpage to a remote browser where the webpage may include a control program to be (passively) displayed on the browser, without any teaching of creating the control program at the browser or uploading PDS (*id.*). The Examiner finds that Lindner teaches “web pages which includes [sic] controller programs being transmitted over the internet which are used to control PLCs” (Ans. 4).

Appellants’ contentions, and the Examiner’s findings, present us with the following issues:

1. Does the combination of Papadopoulos, Lindner, and Bronikowski teach or fairly suggest a web server capable of providing PDS onto the Internet for transmission to the remote device, so that the remote device is able to generate the controller program, as recited in claim 1?

2. Does the combination of Papadopoulos, Lindner, and Bronikowski teach or fairly suggest a processor means for sending the PDS to a remote device and receiving communications concerning the controller program from the remote device, wherein the controller program is generated at the remote device through the use of application software included with the PDS, as recited in claim 15?

3. Does the combination of Papadopoulos, Lindner, and Bronikowski teach or fairly suggest providing the PDS onto the Internet for transmission to the at least one remote device, and receiving from the at least one remote device the generated controller program, as recited in claim 18?

FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

Lindner

1. Lindner teaches a web server that includes a file transfer protocol (FTP) server that accepts downloads of new or replacement web pages and provides them to the file server 20 (col. 4, ll. 27-30).

2. Lindner teaches that the web pages communicated from controller 10a to browser 52 include both data provided by the module 11 having controller ladder scan functionality as well as instructions for how the browser 52 is to display the data (col. 4, ll. 41-45).

3. Lindner teaches that
[t]he web pages can include the data from other controllers either as embedded data, or as a reference to a location of data on another controller . . . [W]hen the browser loads a web page with such a reference the browser will proceed to obtain the referenced data from the other controller
(col. 4, ll. 53-59).

PRINCIPLES OF LAW

Section 103(a) forbids issuance of a patent when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.”

KSR Int’l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations.

Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966). *See also KSR*, 550

U.S. at 407 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”).

ANALYSIS

CLAIMS 1-5, 10, AND 14-20

With respect to the limitations of independent claim 1, the Examiner admits that Papadopoulos does not teach providing PDS³ onto the Internet for transmission to a remote device (Ans. 4), but finds that “Lindner expressly discloses web pages which includes [sic] controller programs being transmitted over the internet which are used to control PLCs” (*id.*). We have reviewed the sections of Lindner cited by the Examiner, and while we find teachings of an FTP server 34 that accepts downloads of web pages and provides them to file server 20 (FF 1), web pages 21 including data 11 from PLC 10a (FF 2), and web pages including data from other controllers (FF 3), we find no teaching of web pages including controller programs (as the Examiner alleges) or any other sort of programs, or any provision of (executable) software onto the Internet for transmission to a remote device, so that the remote device is able to generate the controller program. We therefore find that the Examiner erred in setting forth a *prima facie* case of the obviousness of claim 1 over the combination of Papadopoulos in view of Lindner and Bronikowski.

With respect to the specific limitations of independent claim 15, as noted *supra* we have reviewed Lindner and find that it lacks a teaching of processor means sending the PDS to a remote device, or generating the

³ The Examiner’s rejection relies on Bronikowski for a teaching of PDS.

controller program at the remote device through the use of application software included with the PDS. We therefore find that the Examiner erred in setting forth a prima facie case of obviousness of claim 15 over the combination of Papadopoulos in view of Lindner and Bronikowski.

Turning to the specific limitations of independent claim 18, as noted *supra* we have reviewed Lindner and find that it lacks a teaching of providing the PDS (or any other software) onto the Internet for transmission to the at least one remote device, and receiving from the at least one remote device the generated controller program. We agree with Appellants' argument that Lindner teaches only an uploading of a web page holding a control program for passive viewing of the control program. The control program is neither modified nor downloaded for execution on the controller and downloaded back to the controller (App. Br. 11).

Because we find that the Examiner erred in setting forth a prima facie case of obviousness for claims 1-5, 10, and 15-20 over Papadopoulos in view of Lindner and Bronikowski, we will not sustain the Examiner's § 103 rejection of these claims.

CLAIMS 6-9 AND 11-13

As noted *supra*, we do not sustain the § 103 rejection of claim 1, from which these claims depend. We have reviewed Hauet and Chan, and find that these references do not remedy the noted deficiencies of the combination of Papadopoulos, Lindner, and Bronikowski. Therefore, we will not sustain the § 103 rejection of claims 6-9 and 11-13, for the reasons expressed *supra* with respect to parent claim 1.

CONCLUSIONS

1. The combination of Papadopoulos, Lindner, and Bronikowski does not teach or fairly suggest a web server capable of providing PDS onto the Internet for transmission to the remote device, so that the remote device is able to generate the controller program, as recited in claim 1.

2. The combination of Papadopoulos, Lindner, and Bronikowski does not teach or fairly suggest a processor means for sending the PDS to a remote device and receiving communications concerning the controller program from the remote device, wherein the controller program is generated at the remote device through the use of application software included with the PDS, as recited in claim 15.

3. The combination of Papadopoulos, Lindner, and Bronikowski does not teach or fairly suggest providing the PDS onto the Internet for transmission to the at least one remote device, and receiving from the at least one remote device the generated controller program, as recited in claim 18.

ORDER

The Examiner's rejection of claims 1-20 is reversed.

REVERSED

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